Superfund Sites

1. Regarding the U.S. Oil Recovery Superfund site in Pasadena, Texas, when was EPA initially informed of the spill of hazardous substances? How much time expired between the initial notification of the spill and when the agency began its assessment of the site?

EPA does not believe there is evidence of a release of toxic materials from this site during Hurricane Harvey. The Site is located in Pasadena, Texas, and consists of two properties: a former municipal wastewater treatment facility at 200 North Richey Street; and, a former waste oil recycling facility at 400 North Richey Street. The EPA directed the Potentially Responsible Parties to secure the Site prior to the August 25, 2017, landfall of Hurricane Harvey. On August 29, 2017, the PRPs reported that the former wastewater treatment plant was flooded due to Hurricane Harvey. On September 4, 2017, EPA staff conducted an onsite inspection to assess conditions at the Site as a whole, and directed the PRPs to collect samples from the Site to determine if there were releases of toxic materials. On September 9, 2017, the PRPs reported that on September 6, 2017, there was a spill of an unknown quantity of stormwater from the former wastewater treatment facility. Also on September 9, 2017, the PRPs reported a 200-gallon discharge of stormwater on September 7, 2017, from the former wastewater treatment facility. On September 11, 2017, EPA had received all analytical results showing no evidence of a release. On September 13, 2017, in response to inquiries about a possible oil spill, EPA conducted an inspection of nearby Vince Bayou and did not find any evidence of a discharge of material from the Site. On September 16, 2017, Site conditions were stabilized and the Site transitioned back to normal operations.

2. What steps have been taken to address the hazardous spills at U.S. Oil Recovery? Are future actions planned? If so, what is the timeline for such actions?

As part of the initial response actions since July 2010, the EPA took steps to contain off-site migration, mitigate the threat to the public and to Vince Bayou, and stabilize the Site. As part of those efforts, approximately 833,500 gallons of non-hazardous contaminated stormwater were transported off-site. Hazardous and non-hazardous sludges were removed and also disposed of off-site. Pursuant to the August 2011 AOC, the EPA has continued to protect the public health, welfare, and the environment by overseeing subsequent Site stabilization activities performed by the PRP Group. In addition to the removal action activities described in detail below, the PRP Group's stabilization activities have included: (1) Site security and video monitoring; (2) twice a week inspections of the Site; (3) pump down/removal of liquids as necessary to prevent releases from containment areas and other Site structures; and (4) repairs. The PRP Group has removed the storage tanks themselves and drums, totes, the bioreactor, roll-off containers, laboratory chemicals. As part of those efforts and the removal action activities, approximately 4,500,000 gallons of liquid and 1,000,000 gallons of solids have been removed and transported off-site.

Prior to the landfall of Hurricane Harvey on August 25, 2017, the PRP Group, under EPA oversight, completely removed the residual sludge from the storage tanks, containment areas, and process equipment from the 400 North Richey property and completed pressure washing of the different areas on the property. The PRP Group also removed standing water from the

different structures and containments from the 200 North Richey property to maintain freeboard prior to the Hurricane landfall.

Air Pollution Impacts

3. When and where did these releases occur? What monitoring has been done to identify the sources of these releases and the pollutants released?

The U.S. EPA Airborne Spectral Photometric Environmental Collection Technology (ASPECT) is an airborne platform equipped with special chemical and radiological sensors and imagery technologies. It detects chemicals while collecting aerial photos and videos for situational awareness during an incident. The ASPECT flew 28 flights over 112 hours covering miles of pipelines, 22 refineries, 134 Risk Management Plan facilities, 456 drinking water plants and 105 waste water plants in support of the Hurricane Harvey response from August 31 to September 11, 2017. The screening level results from ASPECT were compared to the list of TCEQ short-term Air Monitoring Comparison Values (AMCVs). The screening data found no exceedances of the short-term AMCVs. ASPECT was also instrumental in monitoring and providing data to emergency responders on the ground during the Arkema explosion and fire.

EPA deployed two Trace Atmospheric Gas Analyzer (TAGA) mobile laboratories, commonly referred to as TAGA buses, to assist in response activities as a result of Hurricane Harvey. The TAGA is self-contained and is capable of real-time monitoring of outdoor air emissions. The TAGA lab monitored the ambient air in the vicinity of approximately 25 facilities and adjacent neighborhoods in the impacted areas from September 5 to September 20, 2017. The facilities ranged over 321 miles and the TAGA covered over 640 miles in conducting the air monitoring. No monitored readings exceeded the TCEQ AMCV short-term screening levels.

Portable High-Throughput Integrated Laboratory Identification System (PHILIS) is a mobile laboratory that EPA used to screen floodwaters associated with the Arkema fire early in the response. Floodwater samples were analyzed for volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs). No VOCs or SVOCs were detected in the Arkema floodwater samples.

4. What actions did the Agency take before and after the storm to discuss possible risks from these releases with affected communities?

Prior to the storm making landfall, EPA Office of Environmental Justice reached out to environmental advocates in both Louisiana and Texas. EPA hosted weekly conference calls with environmental justice advocates from both Texas and Louisiana to discuss response related issues and participated in the TCEQ conference call to discuss response activities with key environmental advocates in Texas. Prior to the storm, EPA launched its hurricane website which includes useful information at https://www.epa.gov/hurricane-response as well as hurricane response specific webpages like www.epa.gov/hurricane-harvey as response activities were underway. Under ESF-10 Unified Command, EPA Community Liaisons (CLs) were deployed across the Hurricane Harvey impacted area to provide federal and state guidance and best practices to thousands of individuals that area dealing with potential hazards in damaged or lost

homes. The CLs have worked through the established Branches in Corpus Christi, Houston and Beaumont/Port Arthur, and with County Emergency Operations Commands and Disaster Recovery Centers. The CL's have provided information to many organizations including faith based organizations, schools, YMCA's, churches and non-profits in urban and rural areas. The CLs have been the face of the government for many individuals impacted by the storm, and have brought issues such as health concerns and illegal dumping in environmental justice areas, to the attention of State and Federal officials. CL's have reached out to organizations to help address language barriers in many communities. In addition, the CL's have worked with local DRC's and met bus loads of families returning home for the first time. Many of those returning home have expressed appreciation that the CL's were the first government representatives that provided them with useful information about hazards. The CL's have ensured that the families they reach have information and resources that are available to them as they rebuild their lives. Community assistance programs are a critical part of the overall efforts to address potential hazards and help better inform individual decision-making to reduce potential environmental and public health problems from disasters. EPA also deployed liaison to the City of Houston Mayor's office and the Nueces County Judge office to assure coordination. EPA provide a public information officer in the FEMA ESF-15 External Affairs unit and Joint Information Center in Austin to assist with federal coordination and information sharing.

5. What actions is EPA taking to prevent similar releases in the future?

EPA partners with State Agencies and the United States Coast Guard to assess industrial sources for damages leading to environmental releases and their ability resume operations safely and without issues post-storm. EPA and its partners will contact these facilities via phone, email or an on-site visit. The list of facilities is developed using EPA databases of facilities regulated under the Clean Water Facility Response program, the Clean Air Act Risk Management program and the Resource Conservation and Recovery Act.

The list is compiled and entered into the EPA Region 6 response data management system, Response Manager. Once the list is generated, EPA and its partners will contact the facility and gather a set of data which assists in determining if follow-up activities are needed. A list of questions can be loaded into Response Manager depending on the event to determine extent of damage, current status of the facility, extent of flooding and any spills or releases which may have occurred.

Once this data has been collected through phone calls, emails or site visits, EPA and its partners can determine if follow-up contact is needed or if an emergency response is needed. All follow-on visits can also be recorded in the data system. Recording each contact allows EPA and its partners to share information instantaneously and also records when and if contact has been made with a facility, ensuring multiple contacts by multiple agencies are not made.

<u>Drinking Water Systems</u>

6. On what date did EPA begin monitoring public drinking water systems after Hurricane Harvey? What were the results of monitoring, and how did the Agency communicate drinking water risks to affected communities?

EPA was asked by the Texas Commission on Environmental Quality (TCEQ) to assist the state with drinking water and waste water system assessments and specific response needs (conduct phone assessments followed by field assessments using the state's information template). EPA was not asked to monitor public water systems so no samples were collected. On August 28, 2017, EPA Region 6 deployed ten employees to assist TCEQ in Austin, TX with drinking water and waste water system phone assessments. Additional EPA employees were deployed on September 1, 2017 to conduct field assessments.

7. What water systems were affected? What water systems, if any, are still affected?

TCEQ has a list of water systems affected in the Response Manager database as well as on their website: https://www.tceq.texas.gov/response/hurricanes/hurricane.html/#current

It was TCEQ's decision to post only community water systems (CWS) on their web site. These are the largest water systems serving the largest portion of the population in the storm effected area. (This did not mean that TCEQ treated non-community water systems (NCWS) any differently in terms returning to operational status and criteria required to lift a BWA, but rather a way they used to stage the sequence of water system assessments).

The water systems are still affected by Harvey can be found on their web site. Per the web site, as of 10/6/17, out of the 2238 CWS affected, 2236 (99.9% CWS) are fully operational and 2 are shut down. Of the 2236 operational systems, 39 remain under a boil water advisory, of which 27 of the 39 await bacteriological results to be cleared.

8. What actions is EPA currently taking to ensure public drinking water systems are operating effectively?

EPA continues to assist TCEQ in any capacity that is needed. EPA's role is to support the state primacy agency in their oversight function to ensure public water systems provide safe drinking water to the public.

During the hurricane response, EPA took actions requested by TCEQ, which initially began with staff support at the TCEQ Austin Central Office phone bank, followed by staff support to conduct field assessments in the Houston area, and to provide technical expert assistance to the City of Beaumont water system.

Over the course of two weeks (Sept 1-14, 2017), EPA along with TCEQ and the Texas State Guard conducted 625 drinking water field assessments at 514 public water systems in the Greater Houston area. [At the beginning of the field response (Sept 1), TCEQ provided EPA a list of water systems to focus on (2022 CWS) and over the course of two weeks, EPA worked with the state and returned 1945 CWS to fully operational status, covering 99% of the population (7.23

out of 7.26 million) as of 9/14/2017. On September 15, 2017, TCEQ did not request further assistance, as their Regional Offices resumed their oversight role to contact and assess the remaining public water systems.]

9. What has EPA done to monitor water quality in private wells? What information has been provided to those who rely on private wells for drinking water about the impacts of Hurricane Harvey?

EPA did not monitor private wells. EPA and TCEQ do not have federal and state regulatory authority, respectively, over private wells. Private wells are not regulated under the Safe Drinking Water Act or by state regulations in Texas. However, EPA provided support through Community Information Coordinators (CICs) stationed at each of the local/county EOCs in the 39 declared counties. The CICs worked with TCEQ/HHS/FEMA and provided information and/or flyers to local churches/elected officials/the public on a number of subjects (including debris removal, mold, how to disinfect a well after flooding, and where to obtain information on private well sampling from the local/county health departments.) The local/county health departments, not EPA or TCEQ, offers drinking water bacteriological testing for private wells, for a small fee.